

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Denney

Serial No.:

Group No.: Not Assigned

Filed:

08/09/01

Examiner: Not Assigned

Entitled:

**VACCINES FOR TREATMENT OF
LYMPHOMA AND LEUKEMIA**

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service in an envelope marked Post Office to Addressee under Express Mail Label No EL 790 816 638 US addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Dated: August 9, 2001

By:

Susan M. McClintock
Susan M. McClintock

Sir or Madam:

Prior to the examination of this Application, Applicant respectfully requests that the following amendments be entered.

IN THE SPECIFICATION:

On page 1, line 1, please delete the current title "Vaccines for Treatment of Lymphoma and Leukemia", and insert --Methods of Treating Lymphoma and Leukemia-- as the title of the invention.

On page 1, between lines 1 and 2, please insert --The present Application is a Divisional of pending U.S. Patent Application Serial No. 09/370,453, filed August 9, 1999, which is a Divisional of U.S. Patent Application Serial No. 08/761,277, filed December 6, 1996, now U.S. Patent 5,972,334, which is a Continuation-in-part of U.S. Patent Application Serial No. 08/644,664, filed May 1, 1996, now U.S. Patent 5,776,746.--.

IN THE CLAIMS:

Please cancel Claims: 1-20.

Please amend the following claims:

21. (amended) A method of treating B-cell lymphoma, comprising:

- a) providing:
 - i) a subject having a B-cell lymphoma; and
 - ii) a multivalent vaccine comprising at least two recombinant heavy chain variable regions of immunoglobulin molecules derived from said subjects's B-cell lymphoma cells, wherein said at least two recombinant heavy chain variable regions differ by at least one idiotope; and
- b) administering said multivalent vaccine to said subject.

22. (amended) The method of Claim 21, wherein said vaccine comprises at least two recombinant immunoglobulin molecules comprising said recombinant heavy chain variable regions derived from said lymphoma cells.

24. (amended) The method of Claim 23, wherein said adjuvant is Syntex adjuvant.

Please add the following new claims:

25. (new) The method of Claim 21, wherein at least one of said at least two recombinant heavy chain variable regions is conjugated to a carrier protein.

26. (new) The method of Claim 25, wherein said carrier protein is KLH.

27. (new) A method of treating B-cell lymphoma, comprising:
- a) providing:
 - i) a subject having a B-cell lymphoma; and
 - ii) a multivalent vaccine comprising at least two recombinant light chain variable regions of immunoglobulin molecules derived from said subjects's B-cell lymphoma cells, wherein said at least two recombinant light chain variable regions differ by at least one idiotope; and
 - b) administering said multivalent vaccine to said subject.
28. (new) The method of Claim 27, wherein said vaccine comprises at least two recombinant immunoglobulin molecules comprising said recombinant light chain variable regions derived from said lymphoma cells.
29. (new) The method of Claim 27, wherein said vaccine further comprises an adjuvant.
30. (new) The method of Claim 28, wherein said adjuvant is Syntex adjuvant.
31. (new) The method of Claim 27, wherein at least one of said at least two recombinant light chain variable regions is conjugated to a carrier protein.
32. (new) The method of Claim 31, wherein said carrier protein is KLH.

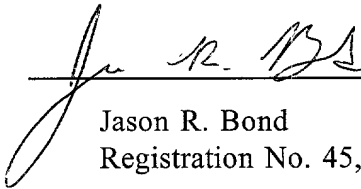
REMARKS

Claims 1-24 were originally filed in the grandparent case. In an Office Action dated September 3, 1997, the Examiner restricted the claims into three Groups, with Group I containing Claims 1-6, Group II containing Claims 7-20, and Group III containing Claims 21-24. In a Response dated January 8, 1998, Applicant elected, without traverse, to prosecute

the Claims of Group II in the grandparent case. In the parent case (a divisional of the grandparent case), Applicant elected the Claims of Group I.

Applicant now files another divisional application to prosecute the Claims of Group III (Claims 21-24).

Dated: August 9, 2001



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In The Specification:

Title beginning at line 1, page 1, has been amended as follows:

[Vaccines for Treatment of Lymphoma and Leukemia] Methods of Treating
Lymphoma and Leukemia

On page 1, between lines 1 and 2, the following text is inserted:

The present Application is a Divisional of pending U.S. Patent Application Serial No. 09/370,453, filed August 9, 1999, which is a Divisional of U.S. Patent Application Serial No. 08/761,277, filed December 6, 1996, now U.S. Patent 5,972,334, which is a Continuation-in-part of U.S. Patent Application Serial No. 08/644,664, filed May 1, 1996, now U.S. Patent 5,776,746.

In the Claims:

Claims 1-20 have been cancelled.

Claims 21, 22 and 24 have been amended as follows:

21. (amended) A method of treating B-cell lymphoma, comprising:

a) providing:

- i) a subject having a B-cell lymphoma; and
- ii) a multivalent vaccine comprising at least two recombinant heavy chain variable regions of immunoglobulin molecules derived from said subjects's B-cell lymphoma cells, wherein said at least two recombinant heavy chain variable regions differ [cells express at least two different immunoglobulin molecules, said immunoglobulin molecules differing] by at least one idiotope; and

b) administering said multivalent vaccine to said subject.

22. (amended) The method of Claim 21, wherein said vaccine comprises at least two recombinant immunoglobulin molecules comprising said recombinant heavy chain variable regions derived from said lymphoma cells.

24. (amended) The method of Claim [22]23, wherein said adjuvant is Syntex adjuvant.

COMPLETE SET OF PENDING CLAIMS

21. A method of treating B-cell lymphoma, comprising:
- a) providing:
 - i) a subject having a B-cell lymphoma; and
 - ii) a multivalent vaccine comprising at least two recombinant heavy chain variable regions of immunoglobulin molecules derived from said subjects's B-cell lymphoma cells, wherein said at least two recombinant heavy chain variable regions differ by at least one idiotope; and
 - b) administering said multivalent vaccine to said subject.
22. The method of Claim 21, wherein said vaccine comprises at least two recombinant immunoglobulin molecules comprising said recombinant heavy chain variable regions derived from said lymphoma cells.
23. The method of Claim 21, wherein said vaccine further comprises an adjuvant.
24. The method of Claim 23, wherein said adjuvant is Syntex adjuvant.
25. The method of Claim 21, wherein at least one of said at least two recombinant heavy chain variable regions is conjugated to a carrier protein.
26. The method of Claim 25, wherein said carrier protein is KLH.
27. A method of treating B-cell lymphoma, comprising:
- a) providing:
 - i) a subject having a B-cell lymphoma; and
 - ii) a multivalent vaccine comprising at least two recombinant light chain variable regions of immunoglobulin molecules derived from said subjects's B-cell lymphoma cells, wherein said at least two recombinant light chain variable regions differ by at least one idiotope; and

b) administering said multivalent vaccine to said subject.

28. The method of Claim 27, wherein said vaccine comprises at least two recombinant immunoglobulin molecules comprising said recombinant light chain variable regions derived from said lymphoma cells.

29. The method of Claim 27, wherein said vaccine further comprises an adjuvant.

30. The method of Claim 28, wherein said adjuvant is Syntex adjuvant.

31. The method of Claim 27, wherein at least one of said at least two recombinant light chain variable regions is conjugated to a carrier protein.

32. The method of Claim 31, wherein said carrier protein is KLH.